

Figure 1: (Prior Art) Tandem Connection

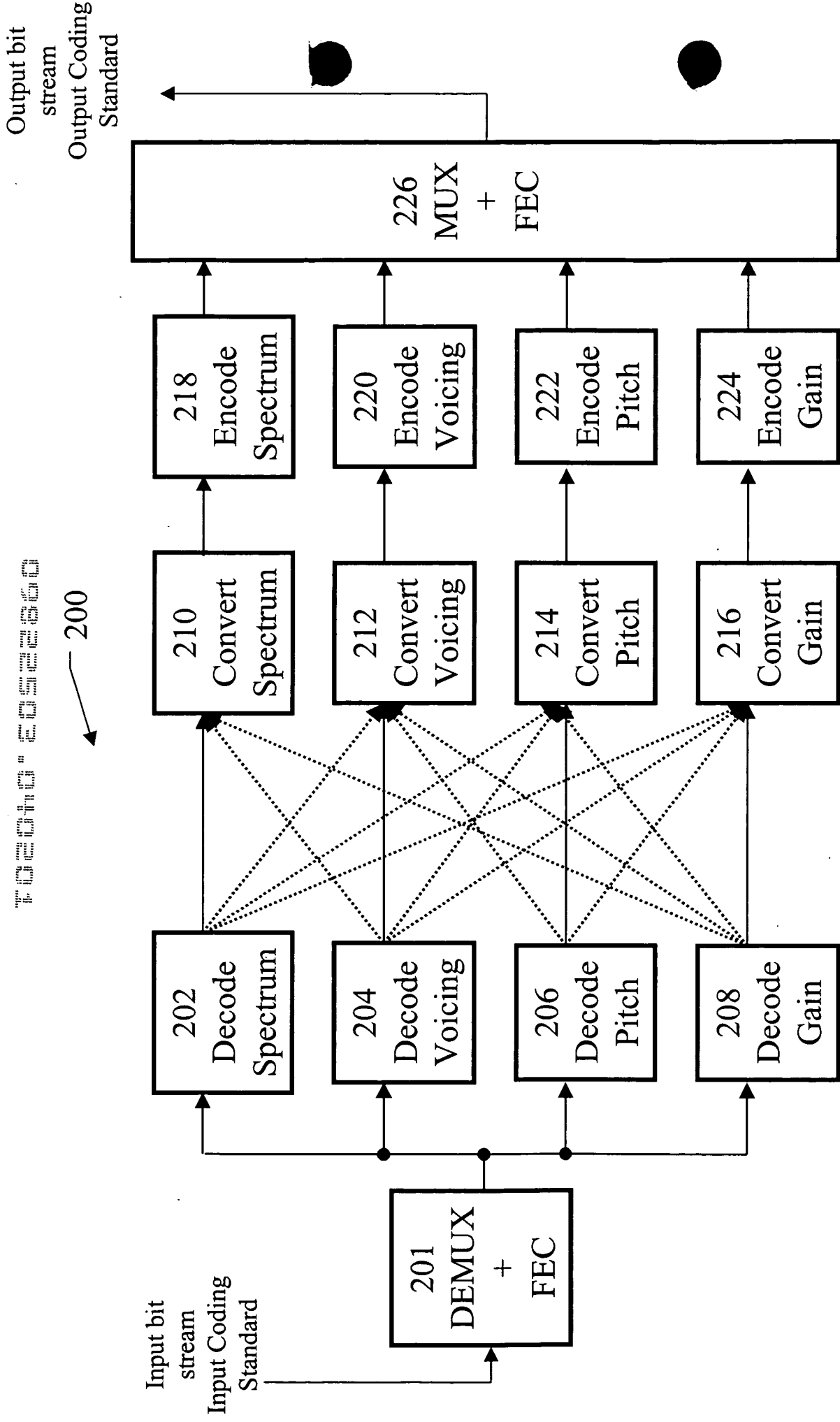


Figure 2: Universal Transcoder

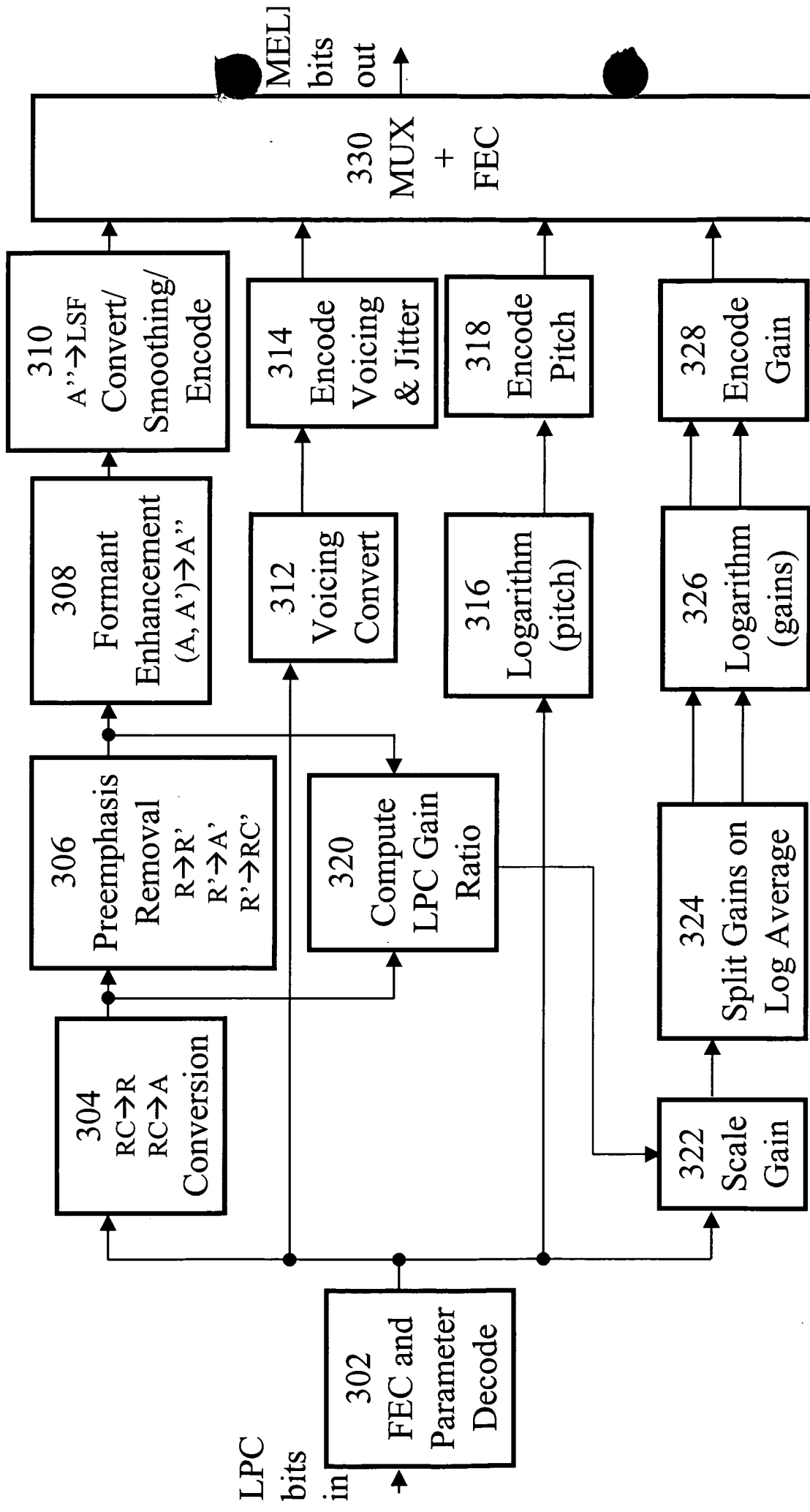


Figure 3: LPC to MELP Transcoder

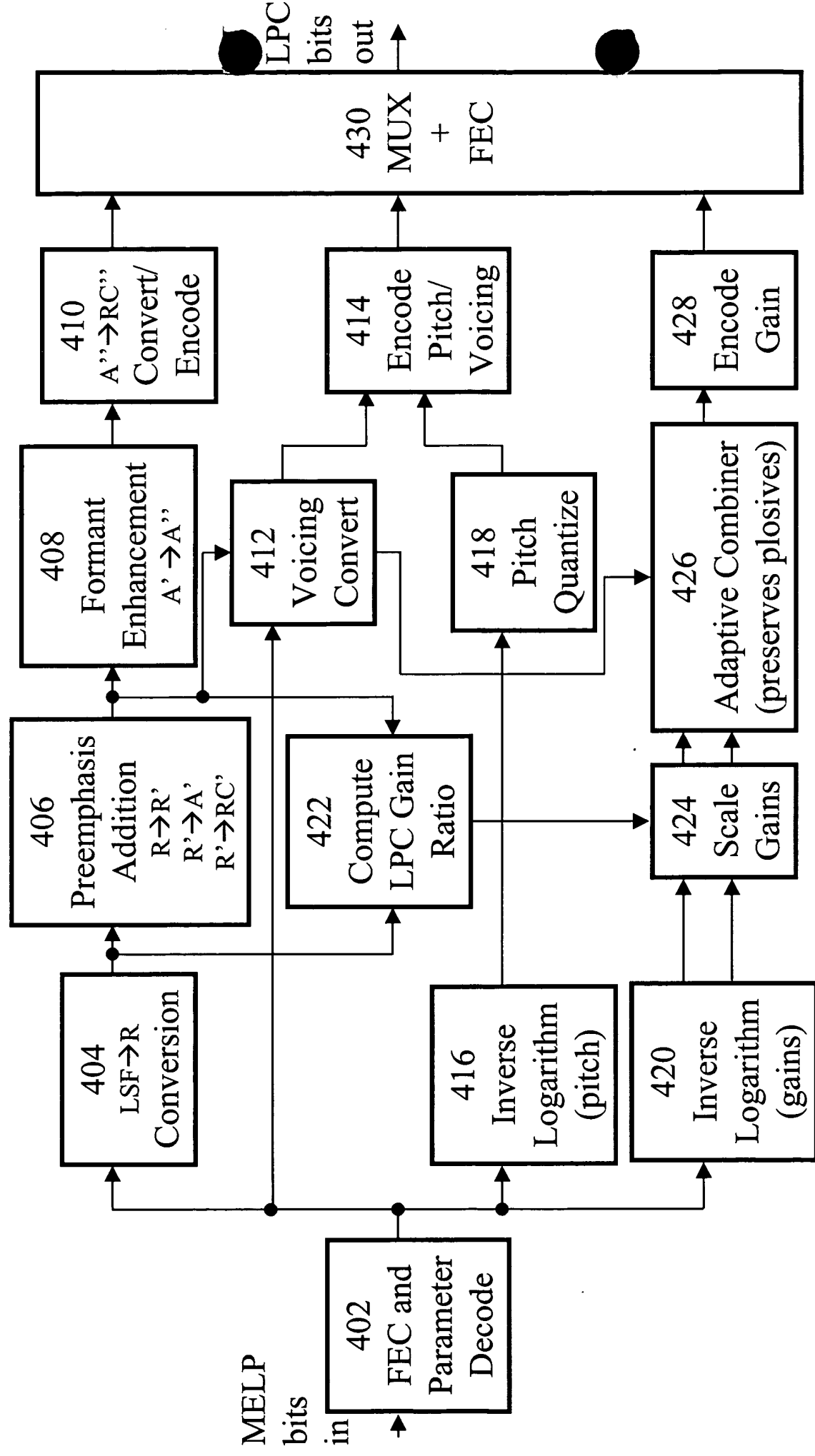


Figure 4: MELP to LPC-10 Transcoder

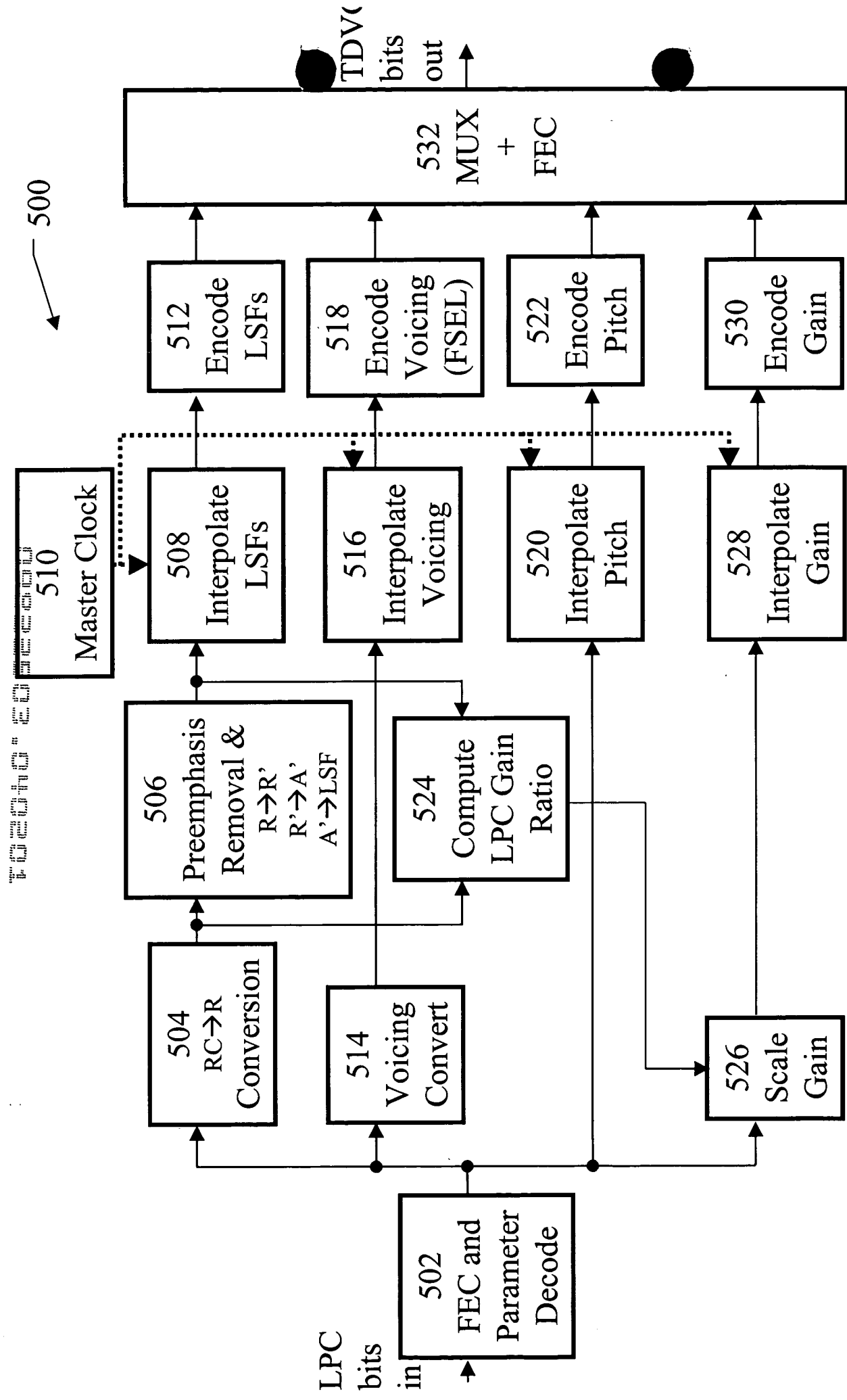


Figure 5: LPC-10 to TDVC Transcoder

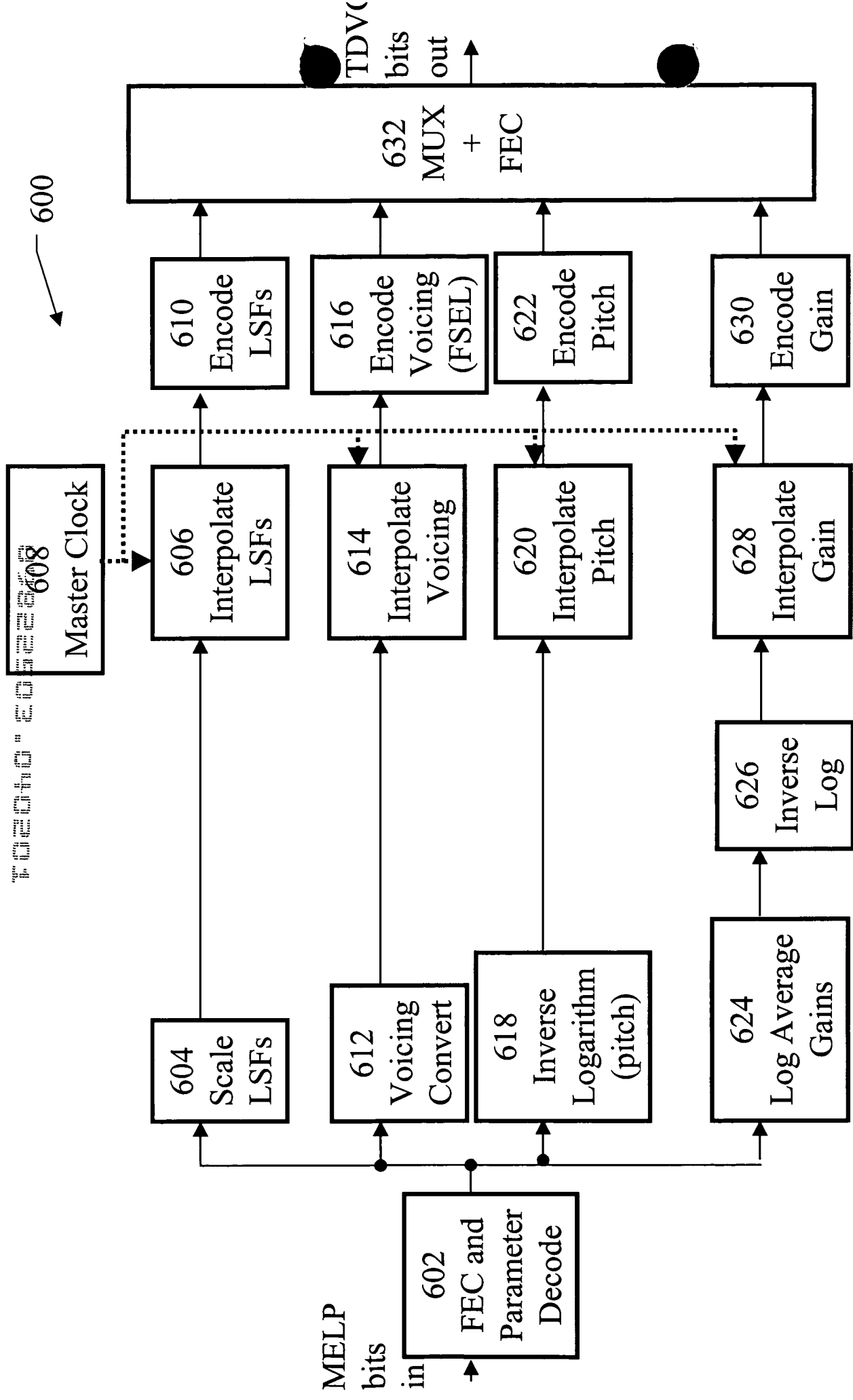


Figure 6: MELP to TDVC Transcoder

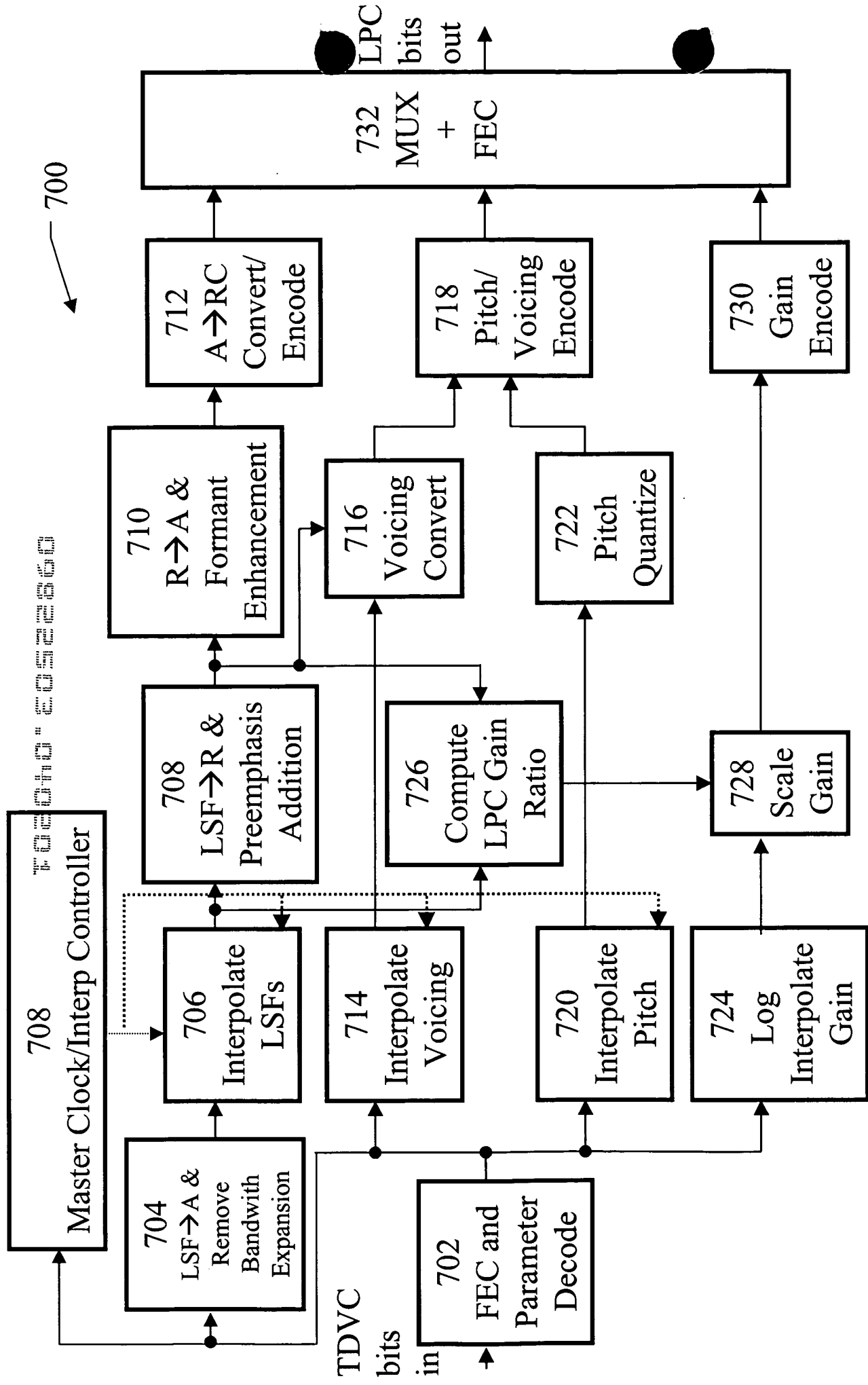


Figure 7: TDVC to LPC-10 Transcoder

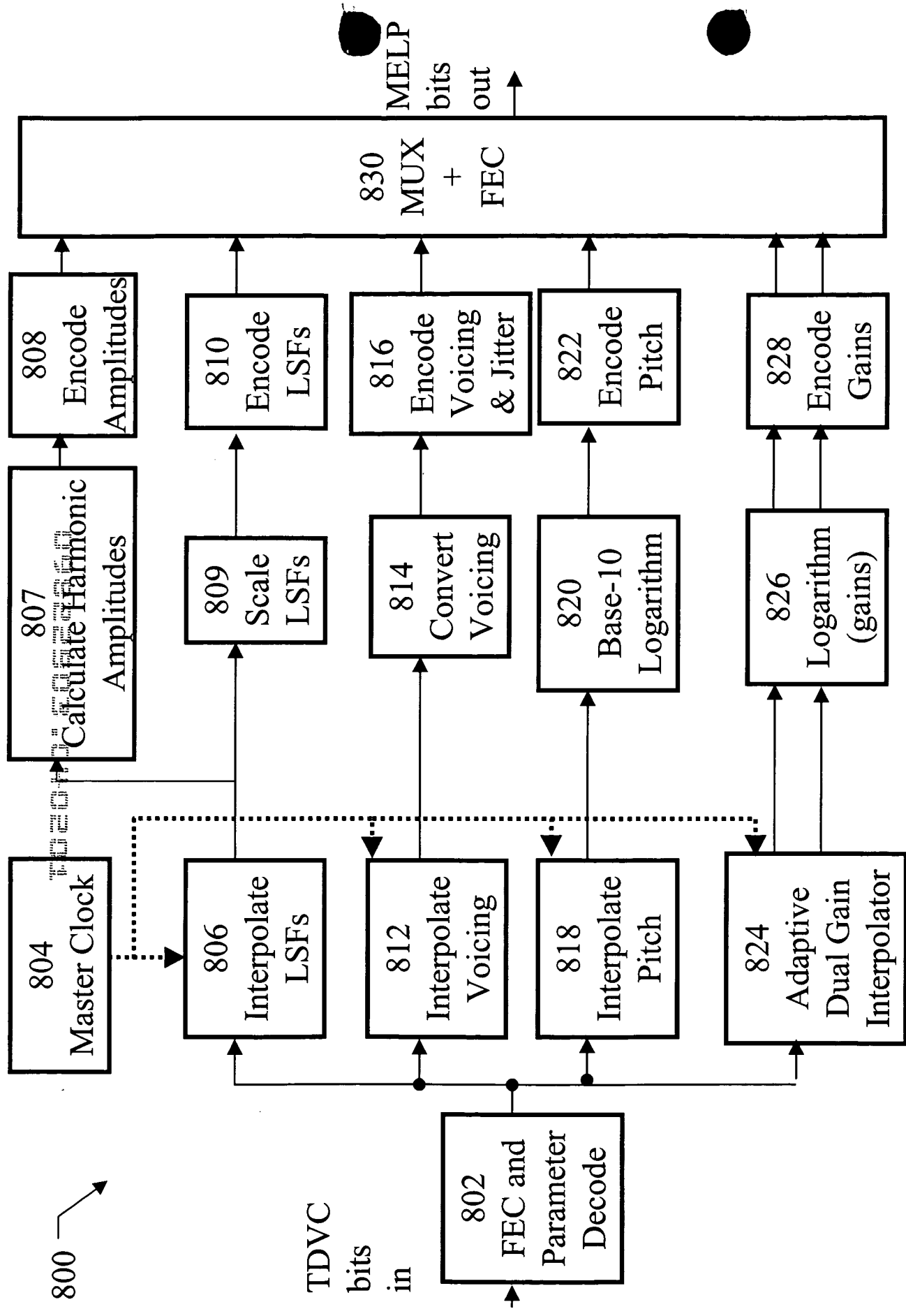


Figure 8: TDVC to MELP Transcoder

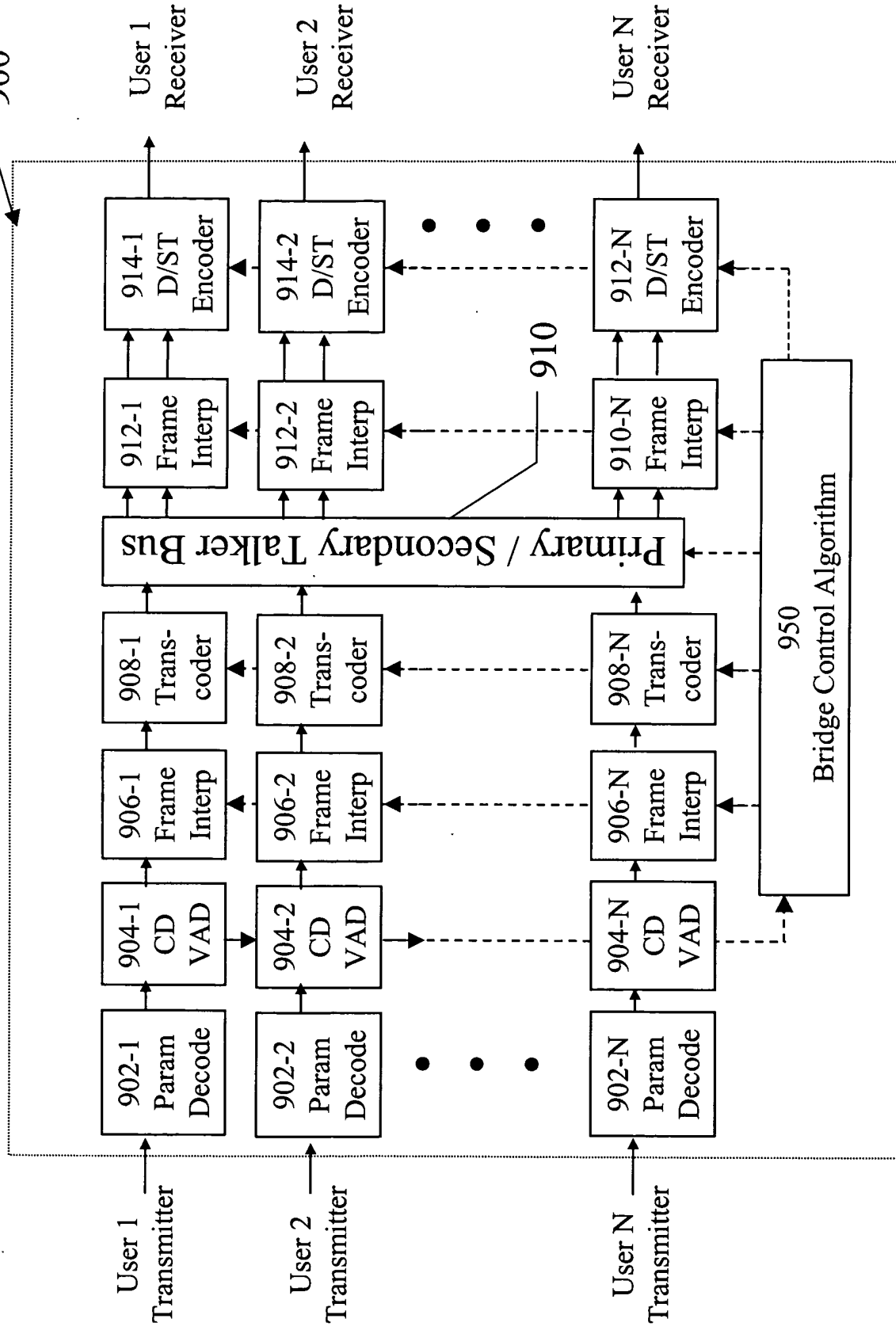


Figure 9: Compressed Domain Conference Bridge

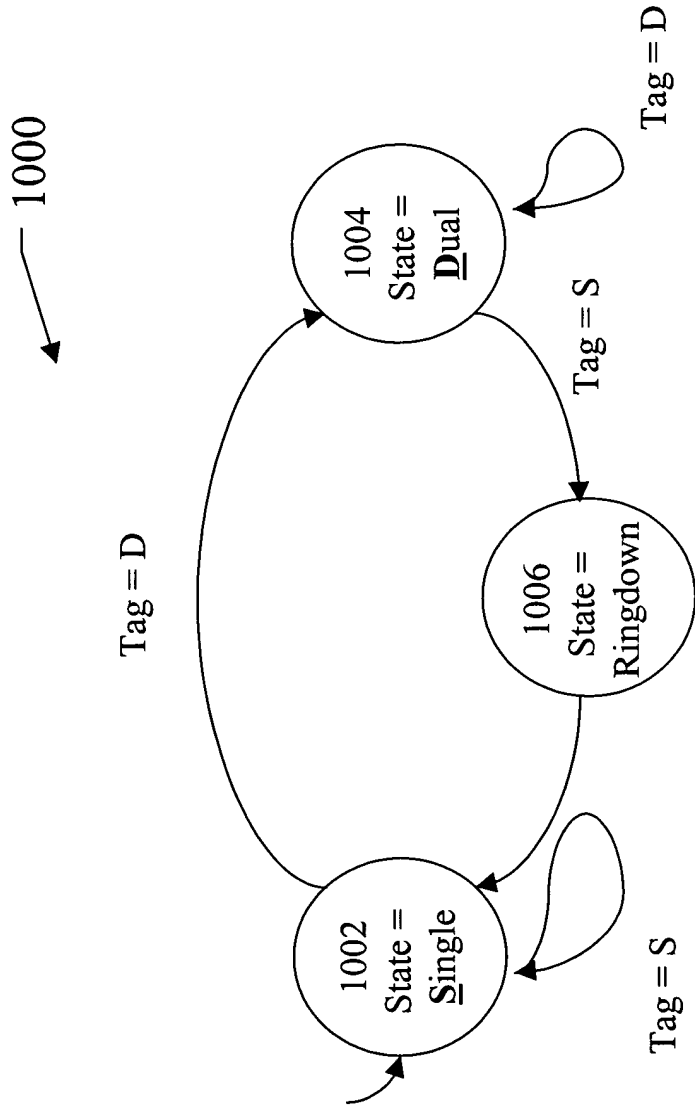


Figure 10: Dual Synthesizer State Diagram

1100

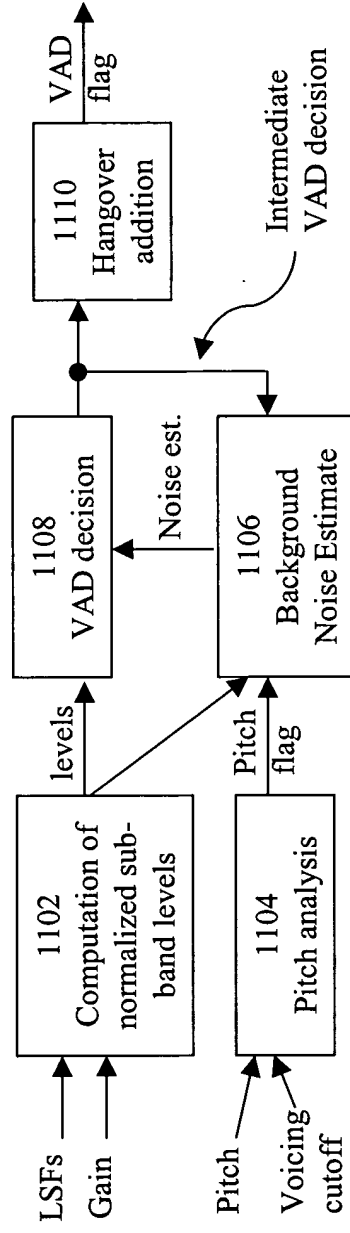


Figure 11: Compressed Domain Voice Activation Detector (CDVAD)

4 bit quantizer table
Frame 2

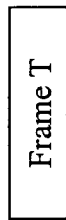
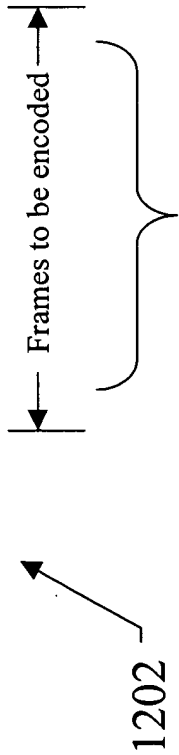
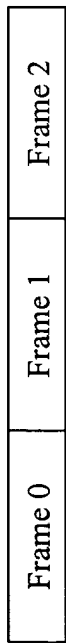
5 bit quantizer table
Frame 1

L0
L3
L6
L9
L12
L16
L20
L24
L28
D-3
D-2
D-1
D+0
D+1
D+2
D+3

L0
L1
L2
L3
L4
L5
L6
L7
L8
L9
L10
L11
L12
L13
L14
L15
L16
L17
L18
L19
L20
L21
L22
L23
L24
L25
L26
L27
L28
L29
L30
L31

Figure 12B

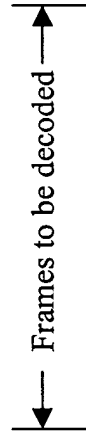
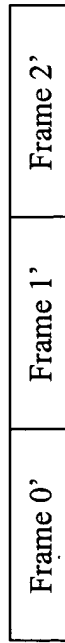
time →



Transmitted Frame
Pitch value P

1204

time →



Transmitted Frame
Pitch value P

Figure 12A